

WHAT IS CLAIMED IS:

1. An image generating apparatus comprising:
  - a first input unit to which a predetermined parameter
  - 5 value about an image to be displayed is inputted;
  - a second input unit to which a plurality of original
  - images with respective parameters defined therefor are
  - inputted; and
  - an image generating unit for performing a
  - 10 predetermined converting process upon the plurality of
  - original images in order to generate intermediate images
  - from the plurality of original images such that the
  - parameter values of the plurality of original images match
  - each other, for combining the plurality of intermediate
  - 15 images thus generated such that their corresponding areas
  - are made to overlap, and for outputting a final combined
  - image;
  - wherein said image generating unit performs a
  - processing such that a parameter value of the final image
  - 20 matches the parameter value inputted with respect to said
  - image to be displayed.
2. An image generating apparatus according to Claim 1,
  - wherein an original image is obtained by digitizing a map,
  - 25 the parameter for that original image is a scale of the map

corresponding to that original image, and said converting processing matches the scale by enlargement or reduction.

3. An image generating apparatus according to Claim 1,  
5 wherein an original image is a rendered CG image, the parameter for that original image is information about the position of the image which is referred to when generating said image to be displayed, and said converting processing is a shifting process performed upon an original image based  
10 on the position information of that original image.

4. An image generating apparatus according to Claim 1, wherein inputted to said second input unit are the plurality of original images, one of which is an original image having  
15 a larger parameter value than that of said image to be displayed and another of which is an original image having a smaller parameter value than that of said image to be displayed.

20 5. An image generating apparatus according to Claim 1, further comprising a storage unit for storing said plurality of original images in advance in association with discrete values of the parameters.

25 6. An image generating apparatus according to Claim 5, wherein said plurality of stored original images have

different detail levels of information included in the respective images.

7. An image generating apparatus according to Claim 6,  
5 wherein said image generating unit combines the intermediate images such that, the higher the degree of approximation of the parameter value of an original image to the parameter value of said image to be displayed, the higher the ratio of the associated intermediate image mixed in said final image,  
10 and such that information included in an original image with a relatively higher detail level of information is included in said final image.

8. An image generating apparatus comprising:  
15 an input unit receiving an instruction about a range of an image to be displayed on a screen; and  
an updating unit for updating, moment by moment, displayed contents such that, when said range is successively shifted and the size of said range is changed  
20 concurrently with the movement, an on-screen movement speed of an image currently displayed on said screen is maintained.

9. An image generating apparatus according to Claim 8,  
wherein inputted to said input unit is, as an element for  
25 defining said range of image, an instruction about an altitude of virtual point of view, and

said updating unit updates the displayed contents such that, when said altitude is changed and thus the size of said range is changed accordingly, an on-screen movement speed of an image currently displayed is maintained.

5

10. An image generating apparatus according to Claim 8, wherein said updating unit detects when said range enters a predetermined area set in advance in an image and changes the size of said range.

10

11. An image generating apparatus according to Claim 10, wherein said predetermined area is set depending on a density of objects a user should pay attention to.

15

12. An image generating apparatus according to Claim 8, wherein when said range is successively shifted in the same direction, said updating unit changes the size of said range in accordance with a degree of succession.

20

13. An image generating method comprising:

preparing in advance a plurality of original images with different detail levels of information; and

performing a processing so that when a target image is generated by combining the original images, information

25

included in an original image with a relatively higher detail level of information is included in said target image.

14. An image generating method according to Claim 13,  
wherein combining is performed such that information of the  
original image with a higher detail level of information  
5 about the configuration of an object commonly included in  
said plurality of original images or information of the  
original image with a higher detail level of information  
about text attached to the object is visibly included in the  
final image.

10

15. An image generating method comprising:

inputting a predetermined parameter value about an  
image to be displayed;

inputting a plurality of original images with  
15 respective parameters defined therefor; and  
an image generating step of performing a predetermined  
converting process upon the plurality of original images in  
order to generate intermediate images from the plurality of  
original images such that the parameter values of the  
20 plurality of original images match each other, combining the  
plurality of intermediate images thus generated such that  
their corresponding areas are made to overlap, and  
outputting a final combined image;

wherein said image generating step performs a  
25 processing such that the parameter value of the final image

matches the parameter value inputted with respect to the image to be displayed.

16. An image generating method comprising:

5 receiving an instruction about a range of an image to be displayed on a screen; and

updating, moment by moment, displayed contents such that, when said range is successively shifted and the size of said range is changed concurrently with the movement, an  
10 on-screen movement speed of an image currently displayed on said screen is maintained.

17. An image generating method comprising:

performing a rendering processing such that, when an  
15 object is moved within a virtual space and the way the virtual space is rendered on a screen is changed, an apparent on-screen speed at which said object is moved is maintained without being influenced by the change in the way the virtual space is rendered on said screen.

20

18. A program executable by a computer, the program including the functions of:

inputting a predetermined parameter value about an image to be displayed;

25 inputting a plurality of original images with respective parameters defined therefor; and

an image generating step of performing a predetermined converting process upon the plurality of original images in order to generate intermediate images from the plurality of original images such that the parameter values of the  
5 plurality of original images match each other, combining the plurality of intermediate images thus generated such that their corresponding areas are made to overlap, and outputting a final combined image;

wherein said image generating step performs a  
10 processing such that the parameter value of the final image matches the parameter value inputted with respect to the image to be displayed.

19. A program executable by a computer, the program  
15 including the functions of:

receiving an instruction about a range of an image to be displayed on a screen; and

updating, moment by moment, displayed contents such that, when said range is successively shifted and the size  
20 of said range is changed concurrently with the movement, an on-screen movement speed of an image currently displayed on said screen is maintained.

20. A computer-readable recording medium which stores a  
25 program executable by a computer, the program including the functions of:

inputting a predetermined parameter value about an image to be displayed;

inputting a plurality of original images with respective parameters defined therefor; and

5 an image generating step of performing a predetermined converting process upon the plurality of original images in order to generate intermediate images from the plurality of original images such that the parameter values of the plurality of original images match each other, combining the  
10 plurality of intermediate images thus generated such that their corresponding areas are made to overlap, and outputting a final combined image;

wherein said image generating step performs a processing such that the parameter value of the final image  
15 matches the parameter value inputted with respect to the image to be displayed.

21. A computer-readable recording medium which stores a program executable by a computer, the program including the  
20 functions of:

receiving an instruction about a range of an image to be displayed on a screen; and

updating, moment by moment, displayed contents such that, when said range is successively shifted and the size  
25 of said range is changed concurrently with the movement, an



on-screen movement speed of an image currently displayed on said screen is maintained.